

Application No.: 10/520,322  
Attorney Docket No.: 55382-23  
First Applicant's Name: Michael Katze  
Application Filing Date: October 27, 2005  
Office Action Dated: October 9, 2007  
Date of Response: April 9, 2008  
Examiner: Misook Yu

IN THE CLAIMS:

Applicants, pursuant to 37 C.F.R. § 1.121, submit the following amendments to the claims:

No amendments are being made at this time.

1. (Original) A method of detecting the presence of HCC in a mammal comprising:
  - a) obtaining a biological sample from the mammal;
  - b) assaying the sample to quantify at least a non-cell-associated HCC related protein; and
  - c) comparing the quantity of the non-cell-associated HCC related protein to a control level.
2. (Original) The method of claim 1 wherein assaying the sample is selected from the group consisting of using an enzyme linked immunosorbent assay (ELISA) and competition assays using monoclonal, polyclonal, or a combination of monoclonal and polyclonal antibodies.
3. (Original) The method of claim 1, wherein assaying the sample includes using a receptor molecule that interacts specifically with the non-cell-associated HCC related protein.
4. (Original) The method of claim 1, wherein assaying the sample includes an activity assay and the non-cell-associated HCC related protein is selected from the group consisting of an enzyme and involved in a quantifiable chemical or biological reaction.
5. (Original) The method of claim 2 wherein the polyclonal antibodies include those that bind PLA2G13.
6. (Original) A method of detecting the presence of HCC in a mammal comprising:
  - a) obtaining a tissue sample from the mammal;
  - b) assaying the sample to quantify at least one of a cell-associated HCC related protein; and
  - c) comparing the quantity of cell-associated HCC related proteins to a control level.

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7. (Original) The method of claim 6, wherein the tissue sample is obtained by biopsy.
8. (Original) The method of claim 6, wherein the tissue sample is a liver tissue sample.
9. (Original) The method of claim 6 wherein assaying the sample is selected from the group consisting of competition assays using monoclonal, polyclonal, or a combination of monoclonal and polyclonal antibodies.
10. (Original) The method of claim 9 wherein the polyclonal antibodies include those that bind PLA2G13.
11. (Original) A method of detecting HCC in a mammal comprising:
  - a) injecting the mammal with a conjugate including a targeting reagent and an imaging agent;
  - b) imaging the mammal; and
  - c) evaluating the resulting image for the presence of at least one of a cell-associated HCC related protein.
12. (Original) The method of claim 11, wherein the targeting agent is selected from at least one of the group consisting of an antibody, a receptor and a ligand and wherein the antibody, receptor and ligand specifically interacts with at least one of the cell-associated HCC related proteins.
13. (Original) The method of claims 11 or 12 wherein the targeting agent is anti-PLA2G13.
14. (Original) The method of claim 11, wherein the imaging agent is selected from the group consisting of a dye, radioisotope and a compound that enhances the sensitivity of a scanning methodology selected from the group consisting of magnetic resonance imaging (MRI), ultrasound, computer assisted tomography (CT), single photon emission computer assisted tomography (SPECT) and immunoscintigraphy.
15. (Original) A method of detecting HCC in a mammal comprising:
  - a) obtaining a sample of the mammal's liver tissue; and
  - b) assaying for transcription of at least one of a HCC related protein by at least one of the group consisting of a reverse transcriptase polymerase chain reaction (RT-PCR) and a nucleic acid hybridization method.

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16. (Original) A method of detecting HCC in a mammal comprising:
- a) obtaining a sample of the mammal's liver tissue; and
  - b) employing at least one of the group consisting of an immunocytochemistry technique using a cell-associated HCC related protein-specific antibody conjugated to at least one imaging agent and an immunohistochemistry technique using a cell-associated HCC related protein-specific antibody conjugated to at least one imaging agent.